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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/483,321	01/14/2000	Gary L. Swoboda	TI-28937	8221

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EXAMINER

DAY, HERNG DER

ART UNIT	PAPER NUMBER
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2128

DATE MAILED: 04/22/2004

17

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/483,321

Applicant(s)

SWOBODA, GARY L.

Examiner

Hemg-der Day

Art Unit

2128

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 17 March 2004.  
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-12 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5) ☒ Claim(s) 1-5 is/are allowed.  
6) ☒ Claim(s) 6-12 is/are rejected.  
7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.  
10) ☒ The drawing(s) filed on 03 November 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.  
4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.  
5) ☐ Notice of Informal Patent Application (PTO-152)  
6) ☐ Other: \_\_\_\_\_.

### **DETAILED ACTION**

1. This communication is in response to Applicant's Amendment (paper # 14) and RCE (paper # 16) to Office Actions dated December 24, 2003 (paper # 13) and March 8, 2004 (paper # 15), faxed February 24, 2004 and March 17, 2004, respectively.

1-1. Claims 4, 6, and 12 have been amended; claims 1-12 are pending.

1-2. Claims 1-12 have been examined. Claims 1-5 are allowed and claims 6-12 have been rejected.

### ***Drawings***

2. The proposed drawing correction and/or the proposed substitute sheets of drawings, filed on October 30, 2003, have been disapproved because they introduce new matter into the drawings. 37 CFR 1.121(f) states that no amendment may introduce new matter into the disclosure of an application.

As described in lines 30-32, page 8 of the original specification, "Table 1 lists these signals, states whether the signal is an input, an output or both, and gives the descriptive name of the signal". In other words, there is no evidence in the original disclosure to support the removing of arrows from the lines in Figure 4. However, Figure 4 displays lines with one arrow, two arrows, or no arrow at all and does not appear to be consistent with table 1. For example, the type of Pins TDO and TCKO is output as shown in Table 1, it is unclear how to interpret it in Figure 4. Also note, it seems no input signal to MERGE 46.

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***Specification***

3. Applicant has amended the specification. The objection to the specification has been withdrawn.

***Claim Objections***

4. The objection to claim 6 has been withdrawn.

***Claim Rejections - 35 USC § 112***

5. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

6. Claim 6-12 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

6-1. The amended claim 6 recites the added limitation "a mode input" in line 28 of the claim. Therefore, the input switch has "a mode input" and the output switch also has "a mode input". However, there is no limitation for both mode inputs to be the same. In other words, the input switch may receive a "serial scan path mode" signal at its mode input and the output switch may receive an "alternate data transfer protocol mode" signal at its mode input. Under this condition, without undue experimentation, it is unclear for one skilled in the art to make and/or use the claimed invention.

- 6-2. Claims 7-12 are rejected as being dependent on a rejected claim.

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7. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

8. Claims 6-12 are rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential steps, such omission amounting to a gap between the steps. See MPEP § 2172.01. The omitted step comprises being a selected module in claim 6 because any nonselected module will be nonresponsive to data on the serial connection.

9. Claims 6-12 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

9-1. Claim 6 recites the limitations "said serial data input" and "said serial data output" in, for example, lines 23 and 29 of the claim. There is insufficient antecedent basis for these limitations in the claim.

9-2. Also note, claim 6 recites the limitation "said mode input" in lines 31 and 34 of the claim. It is vague and indefinite because both lines 21-22 and 28 recite "a mode input" in claim 6.

9-3. Applicant has argued, "Claim 6 has been amended to delete recitation of "greater than a first predetermined number."" in page 9, last second line through page 10, first line of paper # 14. However, the alleged deletion of "greater than a first predetermined number" in claim 6 has only been underlined as shown in the first two lines at page 5 of paper # 14 which is inconsistent with Applicant's argument.

9-4. Claim 8 recites the limitation "said mode input" in lines 7 and 10 of the claim. It is vague and indefinite because both lines 21-22 and 28 recite "a mode input" in claim 6.

9-5. Claims 7 and 9-12 are rejected as being dependent on a rejected claim.

***Allowable Subject Matter***

10. Claims 1-5 are deemed non-obvious over the prior art of record and are allowable.

10-1. As allowable subject matter has been indicated, Applicant's reply must either comply with all formal requirements or specifically traverse each requirement not complied with. See 37 CFR 1.111(b) and MPEP § 707.07(a).

***Applicant's Arguments***

11. Applicant argues the following:

(1) "Thus the original application does provide support for removing the arrows in Figure 4" (page 8, last second paragraph, paper # 14).

(2) For rejections under 35 U.S.C. 112, first paragraph, "Claims 4, 6 and 12 have been amended in response to this rejection" and "Claim 6 has been amended to delete recitation of "greater than a first predetermined number."" (page 9, last paragraph through page 10, first paragraph, paper # 14).

(3) For rejections under 35 U.S.C. 112, first paragraph, "Claim 12 has been amended" (page 10, second paragraph, paper # 14).

(4) For rejections under 35 U.S.C. 112, first paragraph, "The number of bits of the serial connection of the plurality of registers results from the product design and is presumably known to anyone who would construct a product using this invention. With the dimensions of the serial chain of shift registers presumably known, this predetermined number of bits is easily determined" (page 11, first paragraph, paper # 14).

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(5) For rejections under 35 U.S.C. 112, second paragraph, "This module is made insensitive to the serial scan data in the serial scan path mode" (page 11, third paragraph, paper # 14).

(6) For rejections under 35 U.S.C. 112, second paragraph, "Claim 6 has been amended to change "said serial data input" to "said serial input" and to change "said serial data output" to "said serial output."" (page 12, fourth paragraph, paper # 14).

(7) "Claim 6 has been amended at line 28 to state that the output switch also includes a mode input" and "This recitation provides proper antecedent basis for the late limitation in claims 6 and 8" (page 12, fifth paragraph, paper # 14).

### ***Response to Arguments***

**12.** Applicant's arguments have been fully considered.

**12-1.** Applicant's argument (1) is not persuasive. As described in lines 30-32, page 8 of the original specification, "Table 1 lists these signals, states whether the signal is an input, an output or both, and gives the descriptive name of the signal". Figure 4 displays lines with one arrow, two arrows, or no arrow at all and does not appear to be consistent with table 1. For example, the type of Pins TDO and TCKO is output as shown in Table 1, it is unclear for one skilled in the art how to interpret it in Figure 4. Therefore, by removing of arrows from the lines in Figure 4 to overcome the objection of inconsistency is not only improper but also having no support in the original disclosure.

**12-2.** Applicant's argument (2) regarding claims 4 and 12 is persuasive. The original claim rejections in section 6-1 of paper # 13 under 35 U.S.C. 112, first paragraph, for claims 4 and 12



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have been withdrawn. However, the alleged deletion of “greater than a first predetermined number” in claim 6 has only been underlined as shown in the first two lines at page 5 of paper # 14.

12-3. Applicant’s argument (3) is persuasive. The original claim rejections in section 6-2 of paper # 13 under 35 U.S.C. 112, first paragraph, for claim 12 has been withdrawn.

12-4. Applicant’s argument (4) is persuasive when the Examiner interprets “this predetermined number of bits is easily determined” as exactly “the number of bits of the serial connection of the plurality of registers” which is presumably known and “the first section 121 of plural bits” has a number of bits greater in number than “this predetermined number of bits”. The original claim rejection in section 7-1 of paper # 13 under 35 U.S.C. 112, first paragraph, for claims 1-12 has been withdrawn.

12-5. Applicant’s argument (5) is not persuasive. Applicant seems arguing that nonselected module is a module in the serial scan path mode, which has no direct support in the original disclosure because it makes “bypass path 203” meaningless.

12-6. Applicant’s argument (6) is not persuasive because the alleged change cannot be found in the amended claim 6 as shown at pages 4-5 of paper # 14.

12-7. Applicant’s argument (7) is not persuasive because the added limitation “a mode input” makes “said mode input” in claims 6 and 8 vague and indefinite as detailed in sections 9-2 and 9-4 above.

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***Conclusion***

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Herng-der Day whose telephone number is (703) 305-5269. The examiner can normally be reached on 9:00 - 17:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kevin J Teska can be reached on (703) 305-9704. The fax phone numbers for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

Herng-der Day  
April 18, 2004



KEVIN J. TESKA  
SUPERVISORY  
PATENT EXAMINER